UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,531	01/23/2004	Tony Hulkkonen	059643.00361	5351

32294   7590   08/20/2007
SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER
D AGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
08/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/762,531	HULKKONEN ET AL.
	Examiner	**Art Unit**
	Stephen M. D'Agosta	2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -- .

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 July 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-47</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-30 and 32-47</u> is/are rejected.

7)☒ Claim(s) <u>31</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments, see Pre-Appeal, filed 7-3-2007, with respect to the rejection(s) of claim(s) 1-47 under USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Andersson et al..

Claim Objections

Claims 1, 18-20 and 46 objected to because of the following informalities: The claims states "receiving, at the network element, network access information relating to said user equipment, said network access information indicating the areas the user equipment is allowed to access", yet it does not state "where" this information came from, eg. from the mobile or from perhaps a Network Admin (?). Appropriate correction is required.

The examiner must give the broadest reasonable interpretation to all claims presented, hence he interprets that this information can come from (at least) a Network Admin.

Should the applicant wish to amend the claim stating that this information comes from a different entity, please identify where in the specification (page, line) support can be found.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-8, 10-16,18-21, 25-26, 29-30, 32-33, 35-36, 42 and 46-47 rejected

under 35 U.S.C. 102(b) as being anticipated by Andersson et al. US 6,230,017.

As per **claims 1, 18-20, 35 and 46-47,** Andersson teaches a method,

comprising:

supporting emergency calls (C9, L37-42) in a mobile communications

network(figure 1a), said mobile communication network comprising a network element

(figure 1a shows the mobile network with various different "network elements" including

Base Stations, VLR, HLR, MSC, GMSC, PSTN, etc.);

receiving a network access from a user equipment (figure 3 shows the process of

the mobile phone dialing for network access to complete a call. One skilled

understands that network access is a process well known in the art);

receiving, at the network element, network access information relating to said

user equipment, said network access information indicating the areas the user

equipment is allowed to access (Abstract teaches determining the mobile's location and

checking to see if it is located in a cell which it can transmit/receive calls/data. Also see

figure 2a, #112 which shows the HLR/network element storing "Allowed Cells List" and

also figures 2b thru 2d which show Allowed/Restricted Cells and Times);

selectively controlling access to the network in dependence on said network

access information (figure 3) AND disabling the selectively controlling access to the

network for an emergency call network access (See abstract, C2, L25-67 and figure 3

for controlling access. See C9, L59-67 for allowing emergency calls through: "..As

indicated by step 3-2, mobile switching center 30 immediately

checks to determine whether the dialed number corresponds to an emergency service or other toll-free number. *If an emergency service has been dialed, mobile switching center 30 completes the call without reference to any geographical restrictions (see step 3-3)*".

With further regard to claims 18-19, Andersson teaches "computer code/programs" being embodied by the implementation of figure 3 which requires software code/programs running on a processor to perform the stated operations/commands.

With further regard to claims 20 and 46, Andersson teaches various network elements that are involved with the access/denial of calls to/from a mobile device based on its current cell location. Furthermore, Andersson shows that the HLR/VLR stores Allowed Cell lists and thus reads on a "network element".

With further regard to claims 35 and 47, Andersson teaches a communication system (see figure 1a).

As per **claim 2,** Andersson teaches claim 1, wherein said receiving includes receiving the network access information that comprises network area access information (figures 2a thru 2d show "Allowed Cells List" which reads on which cells a mobile can/can't access).

As per **claims 3 and 22,** Andersson teaches claim 1/20, further including: determining whether said network access comprises an emergency call (See C9, L59-67 for allowing emergency calls through:

"..As indicated by step 3-2, mobile switching center 30 immediately checks to determine whether the dialed number corresponds to an emergency service or other toll-free number. *If an emergency service has been dialed, mobile switching center 30 completes the call without reference to any geographical restrictions*").

As per **claims 6 and 25-26,** Andersson teaches claim 1/20, wherein said selectively controlling includes selectively controlling the network which comprises an access network and a core network (figures 2a-2d show access lists stored in the HLR to control whether the network components, eg. access/core components, allow in/outgoing calls to/from the mobile).

As per **claim 7,** Andersson teaches claim 6, wherein the controlling and the disabling the access to the network are performed in the access network (figures 2a-2d show the HLR/VLR as storing the access control data which is used by the MSC/BSC/BTS to allow/deny access).

As per **claim 8,** Andersson teaches claim 6, further comprising: determining whether said network access is an emergency call in dependence on receipt of an indication of the type of network access from the core network (figures 2a thru 2d show the HLR storing the Access Cell List which is used by MSC/BSC/BTS to allow/deny access).

As per **claims 10 and 29,** Andersson teaches claim 1/20, further comprising: detecting a network access initiation; and, responsive thereto, disabling the selectively controlling access to the network (see figure 3 which shows the process of identifying a call and then determining, based on location, if the call is allowed/denied).

As per **claims 11 and 30,** Andersson teaches claim 10/29, wherein said disabling includes disabling for a predetermined time period (figure 2d shows Restricted Times, #116D and #118D, which provides a "time range" whereby calls are allowed/denied, hence a time period is taught. A "timer" must be inherently used in order to measure the elapsed time).

As per **claims 12-13,** Andersson teaches claim 10, further comprising: detecting establishment of a radio access bearer; and responsive thereto, activating the disabling the selectively controlling access to the network for an emergency call network access AND activating the disabling the selectively controlling access to the network only for the emergency call network access associated with that radio access bearer. (See C9, L59-67).

As per **claim 14,** Andersson teaches claim 10, further comprising: terminating said disabling responsive to a control signal (figure 3 shows that each-and-every call begins with a new call operation, hence a "control signal" must be utilized to "reset" the process of figure 3 so that the disablement is not turned on once and then left on. One skilled understands that control signals are used between the network elements to properly control the devices such that each call is identified as being "allowed or denied" and then checked to see if is an emergency call or not).

As per **claims 15 and 32,** Andersson teaches claim 6/25, further comprising: receiving the network access information from the core network (Similar to the rejection of claim 1, the examiner interprets that the Network Access information is inputted by a Network Admin and accessed/transmitted from the HLR/VLR to the appropriate network components, eg. MSC/BSC/BTS).

As per **claims 16, 33, 36 and 42,** Andersson teaches claim 1/20/35, further comprising: detecting termination of an emergency call; and, responsive thereto, enabling the selectively controlling access to the network (figure 3 shows the process of a normal call and an emergency call being completed. The examiner notes that the "enabled/disabled control" process would be "reset" after each-and-every call).

As per **claim 21,** Andersson teaches claim 20, wherein the network access information is shared network area access information (Figures 1a thru 2d show that the access information is stored in a shared network element, eg. HLR/VLR).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-5, 9, 22-24, 27-28, 34 and 37-41 rejected under 35 U.S.C. 103(a) as

being unpatentable over Andersson and further in view of Lindgren.

As per **claims 4-5, 23-24 and 37-38,** Andersson teaches claim 3/22/35, wherein

the determining whether said network access is for an emergency call

received/determined by mobile or network (See C9, L59-67 whereby the "type" of call is

determined to be a emergency call, eg. based on the dialed digits) **but is silent on**

includes receiving an indication of the type of call

Lindgren teaches wherein the step determining said network access an

emergency call includes receiving an indication type call (C2, L54-59 teaches the

activation message includes an "indication" that the call is an emergency call).

It would have been obvious to one skilled in the art at the time of the invention to

modify Andersson, such that an indication is used, to provide means for the network to

quickly determined via the indicator what type of call is being dialed (eg. without having

to read the dialed digits).

As per **claims 9 and 28,** Andersson teaches claim 5/24, further comprising:

activating the disabling the selectively controlling access to the network (See C9, L59-

67 whereby the "type" of call is determined to be a emergency call, eg. based on the

dialed digits), **but is silent on** wherein said activating comprises activating on receipt of the indication of the type of network access being the emergency call.

Lindgren teaches wherein the step determining said network access an emergency call includes receiving an indication type call (C2, L54-59 teaches the activation message includes an "indication" that the call is an emergency call).

It would have been obvious to one skilled in the art at the time of the invention to modify Andersson, such that said activating comprises activating on receipt of the indication of the type of network access being the emergency call, to provide means for using an indication/type to determine what call is being performed (eg. normal, emergency, etc.)

As per **claim 27,** Andersson teaches claim 24, further comprising: determining whether said network access is an emergency call in dependence on receipt of an indication of the type of network access from the core network (figures 2a thru 2d show HLR storing the Access Cell List is used by MSC/BSC/BTS to allow/deny access).

As per **claim 34,** Andersson teaches claim 26, wherein the network element is a radio network controller of a radio access network (figure 1a shows the mobile communicating with a BTS/BSC/MSC).

As per **claim 39,** Andersson teaches claim 38, further comprising: detecting a network access initiation; and, responsive thereto, disabling the selectively controlling access to the network (see figure 3 which shows the process of identifying a call and then determining, based on location, if the call is allowed/denied).

As per **claim 40,** Andersson teaches claim 39, wherein said disabling includes disabling for a predetermined time period (figure 2d shows Restricted Times, #116D and #118D, which provides a "time range" whereby calls are allowed/denied, hence a time period is taught. A "timer" must be inherently used in order to measure the elapsed time).

As per **claim 41,** Andersson teaches claim 39, further comprising: detecting establishment of a radio access bearer; and responsive thereto, activating the disabling the selectively controlling access to the network for an emergency call network access AND activating the disabling the selectively controlling access to the network only for the emergency call network access associated with that radio access bearer. (See C9, L59-67).

Claims 17 and 45 rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson.

As per **claims 17 and 45,** Andersson teaches claim 1/35, further comprising: performing the method in a mobile communication system (figure 1a) **but is silent on** a third generation partnership project.

Andersson does not limit himself to a certain type/generation of mobile network and allows for one skilled to modify various elements/methods within the spirit and scope of the invention (C12, L1-5).

The examiner takes **Official Notice** that 3GPP mobile networks are known in the art and provide similar services (eg. backward compatible) as those from previous generations. Hence one skilled would modify Andersson's patented concepts and apply them to future (eg. 3GPP) mobile networks.

It would have been obvious to one skilled in the art at the time of the invention to modify Andersson, such that 3GPP networks are supported, to provide means for supporting industry standards in new/future networks when they are rolled out.

Claims 43-44 rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson and further in view of Kowaguchi and Choi et al..

As per claims 43-44, Andersson teaches claim 35 **but is silent on** further including means for receiving an indication of emergency call on relocation call to access network AND/OR further including means transmitting an indication the emergency call on relocation of the call another access network.

The primary examiner notes that Lindgren does discuss the fact that the user may be roaming (C5, L12-22) and determining the "identity of the locally geographic VoIP call server that should receive the forthcoming call control signals from the mobile phone" which suggests Lindgren does understand that the location of the mobile user is important and must be determined. Also, since the call is an emergency call, a handover (eg. relocation of the call to another network) must be supported as well.

The examiner also notes that **Kowaguchi** teaches a mobile device that can determine it's own location and then use an inhibit table to turn itself Off/On (Abstract), eg. no "network access information" is needed to be received from the network. Furthermore, **Choi** teaches handing off an emergency call (C6, L42-53):

"...*Reference is now made to FIG. 5 wherein there is shown a message flow and network operation diagram illustrating use of an information request message in accordance with the present invention to request call related information following inter- exchange hand-off of an emergency services call. An emergency services call (e.g., a 911 call) 500 is currently in existence and has proceeded through a completed inter-exchange hand-off. Thus, both a serving exchange 502 and an anchor exchange 504 are implicated in handling the call 500 between a mobile station 506 and an emergency services center 508...*"

It would have been obvious to one skilled in the art at the time of the invention to modify Lindgren, such that it includes means for receiving an indication of emergency call on relocation call to access network AND/OR further including means transmitting an indication the emergency call on relocation of the call to another access network, to provide means for supporting the emergency call during relocation/handoff.

Allowable Subject Matter

Claim 31 objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

1. US 5,214,789

2. US 5,778,304

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-

272-7862. The examiner can normally be reached on M-F, 8am to 5pm.
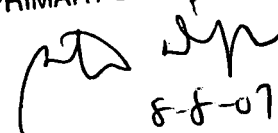
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

STEVE M. D'AGOSTA
PRIMARY EXAMINER

8-8-07